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	STA	TEMENT UNDER	R 37 CFR 3.73(b)	1
Applicant/Patent Ow	ner: Flaherty, J. Christopher			
Application No./Pate	ent No.: 10/714,155		Filed/Issue Date	November 14, 2003
Titled: Tissue Pe	enetrating Catheters Having	Integral Imaging	Transducers and	Their Methods of Use
Medtronic Vascula	r, Inc.	_{, a} Corpora	tion	
(Name of Assignee)			Assignee, e.g., corporat	ion, partnership, university, government agency, etc.
states that it is:				
1. X the assig	nee of the entire right, title, and	interest in;		
	nee of less than the entire right, ent (by percentage) of its owner			
3. the assig	nee of an undivided interest in t	he entirety of (a co	mplete assignmen	nt from one of the joint inventors was made)
the patent applicatio	n/patent identified above, by vir	tue of either:		
the Unite	nment from the inventor(s) of the d States Patent and Trademark refore is attached.	e patent application Office at Reel 01	n/patent identified a	above. The assignment was recorded in Frame 0001 , or for which a
OR COPY the	refore is attached.			
B. A chain o	of title from the inventor(s), of the	e patent application	/patent identified a	above, to the current assignee as follows:
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Addition	al documents in the chain of title	e are listed on a su	pplemental sheet(s	s).
	y 37 CFR 3.73(b)(1)(i), the doc ly is being, submitted for recorda			le from the original owner to the assignee was,
	parate copy (<i>i.e.</i> , a true copy of with 37 CFR Part 3, to record the)) must be submitted to Assignment Division in PTO. <u>See</u> MPEP 302.08]
The undersigned (wh	nose title is supplied below) is a	uthorized to act on	behalf of the assig	gnee.
Ween !	year		*	7/30/2007
Signature				Date
William L	- Haynes_			Senior Patent Counsel
Printed or Ty	/ped Name/			Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner** for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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AUGUST 18, 2004

PTAS



102681675A

STOUT, UXA, BUYAN, ET.AL. ROBERT D. BUYAN 4 VENTURE SUITE 300 IRVINE, CA 92618

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RECORDATION DATE: 02/26/2004

REEL/FRAME: 015000/0001 NUMBER OF PAGES: 20

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

TRANSVASCULAR, INC.

DOC DATE: 09/09/2003

ASSIGNEE:

MEDTRONIC VASCULAR, INC.

3576 UNOCAL PLACE

SANTA ROSA, CALIFORNIA 95403

SERIAL NUMBER: 09708923

FILING DATE: 11/08/2000

ISSUE DATE:

PATENT NUMBER: TITLE: METHODS AND APPARATUS FOR BYPASSING ARTERIAL OBSTRUCTIONS AND/OR

PERFORMING OTHER TRANSVASCULAR PROCEDURES

SERIAL NUMBER: 10425543

FILING DATE: 04/29/2003

PATENT NUMBER: ISSUE DATE:

TITLE: METHODS AND APPARATUS FOR BYPASSING ARTERIAL OBSTRUCTIONS AND/OR

PERFORMING OTHER TRANSVASCULAR PROCEDURES

015000/0001 PAGE 2 SERIAL NUMBER: 60005164 FILING DATE: 10/13/1995 PATENT NUMBER: ISSUE DATE: TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR INTERVENTION SERIAL NUMBER: 09181701 FILING DATE: 10/28/1998 SERIAL NUMBER: 09181701 FILING DATE: 10/28/1998
PATENT NUMBER: 6746464 ISSUE DATE: 06/08/2004 TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR INTERVENTION SERIAL NUMBER: 10640998 FILING DATE: 08/14/2003 PATENT NUMBER: ISSUE DATE: TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR INTERVENTION SERIAL NUMBER: 60010614 FILING DATE: 02/02/1996 PATENT NUMBER: ISSUE DATE: TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR SERIAL NUMBER: 10425756
PATENT NUMBER: INTERVENTION FILING DATE: 04/29/2003 ISSUE DATE: TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR INTERVENTION SERIAL NUMBER: 60028922 FILING DATE: ISSUE DATE: FILING DATE: 08/26/1996 PATENT NUMBER: TITLE: METHODS AND APPARATUS FOR TRANSMYOCARDIAL DIRECT CORONARY REVASCULARIZATION J4 SERIAL NUMBER: 08837295 FILING DATE: 04/11/1997 PATENT NUMBER: ISSUE DATE: TITLE: METHODS AND APPARATUS FOR TRANSMYOCARDIAL DIRECT CORONARY SERIAL NUMBER: 09710332
PATENT NUMBER: REVASCULARIZATION FILING DATE: 11/09/2000 ISSUE DATE: TITLE: METHODS AND APPARATUS FOR TRANSMYOCARDIAL DIRECT CORONARY SERIAL NUMBER: 09994222 FILING DATE: 11/26/2001
PATENT NUMBER:
TITLE: METHODS AND ADDRESS. TITLE: METHODS AND APPARATUS FOR TRANSMYOCARDIAL DIRECT CORONARY SERIAL NUMBER: 10150306
PATENT NUMBER: REVASCULARIZATION FILING DATE: 05/16/2002 ISSUE DATE: TITLE: METHODS AND APPARATUS FOR TRANSMYOCARDIAL DIRECT CORONARY REVASCULARIZATION

SERIAL NUMBER: 10436016

PATENT NUMBER:

FILING DATE: 05/12/2003

ISSUE DATE:

TITLE: METHODS AND APPARATUS FOR CONNECTING OPENINGS FORMED IN ADJACENT

BLOOD VESSELS OR OTHER ANATOMICAL STRUCTURES

SERIAL NUMBER: 09912122

FILING DATE: 07/24/2001

PATENT NUMBER:

ISSUE DATE:

TITLE: CATHETERS AND RELATED DEVICES FOR FORMING PASSAGEWAYS BETWEEN BLOOD VESSELS OR OTHER ANATOMICAL STRUCTURES

SERIAL NUMBER: 10259210

FILING DATE: 09/27/2002

PATENT NUMBER:

ISSUE DATE:

TITLE: TRANSLUMINAL METHODS AND DEVICES FOR CLOSING, FORMING ATTACHMENTS TO, AND/OR FORMING ANASTOMOTIC JUNCTIONS IN, LUMINAL ANATOMICAL STRUCTURES

SERIAL NUMBER: 09911975

FILING DATE: 07/24/2001

PATENT NUMBER:

ISSUE DATE:

TITLE: DEVICES FOR FORMING AND/OR MAINTAINING CONNECTIONS BETWEEN ADJACENT ANATOMICAL CONDUITS

SERIAL NUMBER: 09845372

FILING DATE: 04/30/2001

PATENT NUMBER:

ISSUE DATE:

TITLE: DEVICES FOR FORMING AND/OR MAINTAINING CONNECTIONS BETWEEN OPENINGS IN AN ANATOMICAL CONDUITS

SERIAL NUMBER: 10346556

FILING DATE: 01/17/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: TRANSLUMINAL DEVICES, SYSTEMS AND METHODS FOR ENLARGING

INTERSTITIAL PENETRATION TRACTS

SERIAL NUMBER: 10370429

FILING DATE: 02/20/2003

PATENT NUMBER: ISSUE DATE:

TITLE: CATHETERS, SYSTEMS AND METHODS FOR PERCUTANEOUS IN SITU ARTERIO-

VENOUS BYPASS

SERIAL NUMBER: 10033836

FILING DATE: 12/26/2001

PATENT NUMBER: 6660024 ISSUE DATE: 12/09/2003

TITLE: TISSUE PENETRATING CATHETERS HAVING INTEGRAL IMAGING TRANSDUCERS

AND THEIR METHODS OF USE

72015 618

SERIAL NUMBER: 09538119

FILING DATE: 03/29/2000

PATENT NUMBER: 6726677

ISSUE DATE: 04/27/2004

TITLE: STABILIZED TISSUE PENETRATING CATHETERS

FILING DATE: 09/21/2001

ISSUE DATE: 12/30/2003

PATENT NUMBER: 6660003 TITLE: CATHETER APPARATUS AND METHODOLOGY FOR GENERATING A FISTULA ON-DEMAND BETWEEN CLOSELY ASSOCIATED BLOOD VESSELS AT A PRE-CHOSEN

ANATOMIC SITE IN-VIVO

FILING DATE: 07/11/2000

ISSUE DATE: 06/08/2004

OFFIC SITE INSERIAL NUMBER: 09613675
PATENT NUMBER: 6746407 TITLE: TRANSLUMINALLY DELIVERABLE VASCULAR BLOCKERS AND METHODS FOR FACILITATING RETROGRADE FLOW OF ARTERIAL BLOOD THROUGH VEINS

SERIAL NUMBER: 09320172

FILING DATE: 05/26/1999

ISSUE DATE:

PATENT NUMBER:

TITLE: APPARATUS FOR PROVIDING CORONARY RETROPERFUSION AND METHODS OF USE

SERIAL NUMBER: 09794297

FILING DATE: 02/27/2001

PATENT NUMBER:

ISSUE DATE:

TITLE: APPARATUS FOR PROVIDING CORONARY RETROPERFUSION AND/OR LEFT VENTRICULAR ASSIST AND METHODS FOR USE

SERIAL NUMBER: 10466622

FILING DATE: 03/01/2004

PATENT NUMBER:

ISSUE DATE:

TITLE: DEVICES, SYSTEMS AND METHODS FOR ACUTE OR CHRONIC DELIVERY OF SUBSTANCES OR APPARATUS TO EXTRAVASCULAR TREATMENT SITES

SERIAL NUMBER: 10458153

FILING DATE: 06/10/2003

ISSUE DATE:

PATENT NUMBER: TITLE: METHODS AND APPARATUS FOR ACUTE OR CHRONIC DELIVERY OF SUBSTANCES OR APPARATUS TO EXTRAVASCULAR TREATMENT SITES

SERIAL NUMBER: 10467274

FILING DATE: 03/12/2004

PATENT NUMBER: ISSUE DATE:

TITLE: METHODS AND APPARATUS FOR GUIDED TRANSLUMINAL INTERVENTIONS USING VESSEL WALL PENETRATING CATHETERS AND OTHER APPARATUS

SERIAL NUMBER: 09860147

FILING DATE: 05/17/2001

ISSUE DATE: 03/23/2004 PATENT NUMBER: 6709444

TITLE: METHODS FOR BYPASSING TOTAL OR NEAR-TOTAL OBSTRUCTIONS IN ARTERIES

OR OTHER ANATOMICAL CONDUITS

PZOLS CONZ

SERIAL NUMBER: 10370201 (10/370, 231) FILING DATE: 02/20/2003 ISSUE DATE: PATENT NUMBER:

TITLE: METHOD AND SYSTEM FOR SCREENING REMOTE SITE CONNECTIONS AND

FILTERING DATA BASED ON A COMMUNITY TRUST ASSESSMENT

SERIAL NUMBER: 10391481

FILING DATE: 03/17/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: IMPLANTABLE LUMEN OCCLUDING DEVICES AND METHODS

SERIAL NUMBER: 10411891

FILING DATE: 04/11/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: DEVICES AND METHODS FOR TRANSLUMINAL OR TRANSTHORACIC INTERSTITIAL ELECTRODE PLACEMENT

NO SERIAL NUMBER: 60455015

FILING DATE: 03/13/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: OPTICALLY GUIDED PENETRATION CATHETERS AND THEIR METHODS OF USE

SERIAL NUMBER: 09826049

FILING DATE: 04/03/2001

PATENT NUMBER: 6685648 ISSUE DATE: 02/03/2004

TITLE: SYSTEMS AND METHODS FOR DELIVERING DRUGS TO SELECTED LOCATIONS WITHIN THE BODY

SERIAL NUMBER: 10617105

FILING DATE: 07/09/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: DEFORMABLE SCAFFOLDING MULTICELLULAR STENT

SERIAL NUMBER: 09748109 (09/478109)
PATENT NUMBER:
TITLE: OXIDATION APPARATUS AND MEMORY
SERIAL NUMBER:

FILING DATE: 12/27/2000

ISSUE DATE:

TITLE: OXIDATION APPARATUS AND METHOD OF CLEANING THE SAME

PATENT NUMBER:

FILING DATE: 03/30/2000

ISSUE DATE:

TITLE: APPARATUS AND METHODS FOR CREATING A CHANNEL BETWEEN ADJACENT BODY

SERIAL NUMBER: 09179737

FILING DATE: 10/27/1998

SERIAL NUMBER: 09179737 FILING DATE: 10/27/1999 PATENT NUMBER: 6379319 ISSUE DATE: 04/30/2002

TITLE: SYSTEMS AND METHODS FOR DIRECTING AND SNARING GUIDEWIRES

SERIAL NUMBER: 10136929 PATENT NUMBER: FILING DATE: 04/30/2002

ISSUE DATE:

TITLE: SYSTEMS AND METHODS FOR DIRECTING AND SNARING GUIDEWIRES

SERIAL NUMBER: 08730327

FILING DATE: 10/11/1996 ISSUE DATE: 02/20/2001 PATENT NUMBER: 6190353

TITLE: METHODS AND APPARATUS FOR BYPASSING ARTERIAL OBSTRUCTIONS AND/OR

PERFORMING OTHER TRANSVASCULAR PROCEDURES

SERIAL NUMBER: 09639963

FILING DATE: 08/16/2000

PATENT NUMBER: 6655386

ISSUE DATE: 12/02/2003

TITLE: TRANSLUMINAL METHOD FOR BYPASSING ARTERIAL OBSTRUCTIONS

SERIAL NUMBER: 08730496 PATENT NUMBER: 5830222 FILING DATE: 10/11/1996 ISSUE DATE: 11/03/1998

TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSITITIAL TRANSVASCULAR

INTERVENTION

SERIAL NUMBER: 09192554 FILING DATE: 08/10/1998
PATENT NUMBER: 6283983 FILING DATE: 09/04/2001

FILING DATE: 08/10/1998

TITLE: PERCUTANEOUS IN-SITU CORONARY BYPASS METHOD AND APPARATUS

FILING DATE: 10/27/1998

ISSUE DATE: 05/30/2000

SERIAL NUMBER: 09179809
PATENT NUMBER: 6068638 TITLE: DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR

INTERVENTION

SERIAL NUMBER: 09181013

FILING DATE: 10/27/1998

PATENT NUMBER: 6159225 ISSUE DATE: 12/12/2000 TITLE: A DEVICE, SYSTEM AND METHOD FOR INTERSTITIAL TRANSVASCULAR

INTERVENTION

SERIAL NUMBER: 09267943 FILING DATE: 03/11/1999 PATENT NUMBER: 6231587 FILING DATE: 05/15/2001

TITLE: DEVICES FOR CONNECTING ANATOMICAL CONDUITS SUCH AS VASCULAR

STRUCTURES

SERIAL NUMBER: 10095565 7200/05 FILING DATE: 03/13/2002
PATENT NUMBER: 6567311 (,57% 3// ISSUE DATE: 05/20/2003
TITLE: NONVOLATILE MEMORY SYSTEM, SEMICONDUCTOR MEMORY, AND WRITING METHOD

SERIAL NUMBER: 09117520 FILING DATE: 03/17/1999
PATENT NUMBER: 6616675 FILING DATE: 09/09/2003

TITLE: METHODS AND APPARATUS FOR CONNECTING OPENINGS FORMED IN ADJACENT BLOOD VESSELS OR OTHER ANATOMICAL STRUCTURES

SERIAL NUMBER: 08837294 FILING DATE: 04/11/1997 PATENT NUMBER: 6302875 ISSUE DATE: 10/16/2001

> TITLE: CATHETERS AND RELATED DEVICES FOR FORMING PASSAGEWAYS BETWEEN BLOOD VESSELS OR OTHER ANATOMICAL STRUCTURES

PATENT NUMBER: 6638293 SERIAL NUMBER: 09117516 FILING DATE: 01/21/1999 ISSUE DATE: 10/28/2003

TITLE: METHODS AND APPARATUS FOR BLOCKING FLOW THROUGH BLOOD VESSELS

SERIAL NUMBER: 08896307 FILING DATE: 06/28/1997 PATENT NUMBER: 6071292 ISSUE DATE: 06/06/2000

TITLE: TRANSLUMINAL METHODS AND DEVICES FOR CLOSING, FORMING ATTACHMENTS TO, AND/OR FORMING ANASTOMOTIC JUNCTIONS IN, LUMINAL ANATOMICAL STRUCTURES

SERIAL NUMBER: 09543251 FILING DATE: 04/05/2000 ISSUE DATE: 09/11/2001 PATENT NUMBER: 6287317

TITLE: TRANSLUMINAL METHODS AND DEVICES FOR CLOSING, FORMING ATTACHMENTS TO, AND/OR FORMING ANASTOMOTIC JUNCTIONS IN, LUMINAL ANATOMICAL **STRUCTURES**

SERIAL NUMBER: 09908337 FILING DATE: 07/18/2001 PATENT NUMBER: 6491707 ISSUE DATE: 12/10/2002

TITLE: TRANSLUMINAL METHODS AND DEVICES FOR CLOSING, FORMING ATTACHMENTS TO, AND/OR FORMING ANASTOMOTIC JUNCTIONS IN, LUMINAL ANATOMICAL STRUCTURES

SERIAL NUMBER: 07700625 FILING DATE: 05/15/1991 PATENT NUMBER: 5193546 ISSUE DATE: 03/16/1993

TITLE: CORONARY INTRAVASCULAR ULTRASOUND IMAGING METHOD AND APPARATUS

SERIAL NUMBER: 08970694 FILING DATE: 11/14/1997 ISSUE DATE: 08/13/2002 PATENT NUMBER: 6432127

TITLE: DEVICES FOR FORMING AND/OR MAINTAINING CONNECTIONS BETWEEN ADJACENT ANATOMICAL CONDUITS

SERIAL NUMBER: 09056589 FILING DATE: 04/07/1998 PATENT NUMBER: 6561998 FILING DATE: 05/13/2003

TITLE: TRANSLUMINAL DEVICES, SYSTEMS AND METHODS FOR ENLARGING INTERSTITIAL PENETRATION TRACTS

FILING DATE: 03/31/1999 SERIAL NUMBER: 09282276 PATENT NUMBER: 6544230 ISSUE DATE: 04/08/2003

TITLE: CATHETERS, SYSTEMS AND METHODS FOR PERCUTANEOUS IN SITU ARTERIO-VENOUS BYPASS

SERIAL NUMBER: 09282774 FILING DATE: 03/31/1999
PATENT NUMBER: 6375615 ISSUE DATE: 04/23/2002

TITLE: TISSUE PENETRATING CATHETERS HAVING INTEGRAL IMAGING TRANSDUCERS

AND THEIR METHODS OF USE

SERIAL NUMBER: 09505149 FILING DATE: 02/15/2000 PATENT NUMBER: 6589164 ISSUE DATE: 07/08/2003

TITLE: STERILITY BARRIERS FOR INSERTION OF NON-STERILE APPARATUS INTO

CATHETERS OR OTHER MEDICAL DEVICES

SERIAL NUMBER: 09507139 FILING DATE: 02/18/2000 PATENT NUMBER: 6508824 ISSUE DATE: 01/21/2003

TITLE: CATHETER-BASED METHODS, APPARATUSES AND SYSTEMS FOR ENLARGING BLOOD

VESSELS TO FACILITATE THE FORMATION OF PENETRATION TRACTS, FISTULAS

AND/OR BLOOD FLOW CHANNELS

SERIAL NUMBER: 08616588 FILING DATE: 03/15/1996 PATENT NUMBER: 5830224 ISSUE DATE: 11/03/1998

TITLE: CATHETER APPARATUS AND METHODOLOGY FOR GENERATING A FISTULA ON-

DEMAND BETWEEN CLOSELY ASSOCIATED BLOOD VESSELS AT A PRE-CHOSEN

ANATOMIC SITE IN-VIVO

SERIAL NUMBER: 09134995 FILING DATE: 08/17/1998 PATENT NUMBER: 6099542 ISSUE DATE: 08/08/2000

TITLE: CATHETER APPARATUS AND METHODOLOGY FOR GENERATING A FISTULA ON-

DEMAND BETWEEN CLOSELY ASSOCIATED

proll con 1

SERIAL NUMBER: 09960003

FILING DATE: 09/21/2001 PATENT NUMBER: 6669709 ISSUE DATE: 12/30/2003

TITLE: CATHETER APPARATUS AND METHODOLOGY FOR GENERATING A FISTULA ON-DEMAND BETWEEN CLOSELY ASSOCIATED BLOOD VESSELS AT A PRE-CHOSEN

ANATOMIC SITE IN-VIVO

SERIAL NUMBER: 09329386

FILING DATE: 06/10/1999

ISSUE DATE: 10/03/2000 PATENT NUMBER: 6126649 TITLE: STEERABLE CATHETER WITH EXTERNAL GUIDEWIRE AS CATHETER TIP DEFLECTOR

FILING DATE: 01/26/1998
SERIAL NUMBER: 09013657 (09/009/35)
FILING DATE: 01/26/1998
SERIAL NUMBER: 6015504 (6/015,405)
FILING DATE: 01/18/2000
ISSUE DATE: 01/18/2000
TITLE: METHOD FOR INCREASING THE SPF RATING OF TEXTILE FIBERS BY TREATMENT

WITH TRIAZINYLDIAMINO STILBENE COMPOUNDS

SERIAL NUMBER: 08714466

FILING DATE: 09/16/1996

PATENT NUMBER: 5655548 ISSUE DATE: 08/12/1997

TITLE: METHOD FOR TREATMENT OF ISCHEMIC HEART DISEASE BY PROVIDING TRANSVENOUS MYOCARDIAL PERFUSION

PATENT NUMBER: 6447539
TITLE: METHOD

FILING DATE: 09/15/1997

ISSUE DATE: 09/10/2002

TITLE: METHOD AND APPARATUS FOR TRESTING ISCHEMIC HEART DISEASE BY

PROVIDING TRANSVENOUS MYOCARDIAL PERFUSION

* Connertly Assigned to Triundin, LLC V w/STOUT

SERIAL NUMBER: 09208807

FILING DATE: 12/09/1998 ISSUE DATE: 02/13/2001

PATENT NUMBER: 6186972

TITLE: METHODS AND APPARATUS FOR TREATING ISCHEMIC HEART DISEASE BY

PROVIDING TRANSVENOUS MYOCARDIAL PERFUSION

SERIAL NUMBER: 08285468 09/275/797 Provides

FILING DATE: 08/03/1994
PATENT NUMBER: 5569145 (6,569, 195) ISSUE DATE: 10/29/1996
TITLE: METHOD AND APPARATUS FOR MANUFACTURING A SACK BOTTOM

SERIAL NUMBER: 08798700

FILING DATE: 02/12/1997

SEKIAL NUMBER: 08798700
PATENT NUMBER: 5824071

ISSUE DATE: 10/20/1998 TITLE: APPARATUS FOR TREATMENT OF ISCHEMIC HEART DISEASE BY

PROVIDING TRANSVENOUS MYOCARDIAL PERFUSION

SERIAL NUMBER: 09766502

FILING DATE: 01/17/2001

PATENT NUMBER: 6602241 ISSUE DATE: 08/05/2003 TITLE: METHODS AND APPARATUS FOR ACUTE OR CHRONIC DELIVERY OF SUBSTANCES

OR APPARATUS TO EXTRAVASCULAR TREATMENT SITES

SERIAL NUMBER: 09048147

FILING DATE: 03/25/1998

PATENT NUMBER: 6283951

FILING DATE: 03/25/1998 ISSUE DATE: 09/04/2001

TITLE: SYSTEMS AND METHODS FOR DELIVERING DRUGS TO SELECTED LOCATIONS

WITHIN THE BODY

SERIAL NUMBER: 09089032

FILING DATE: 06/02/1998

PATENT NUMBER: 6330884

ISSUE DATE: 12/18/2001

TITLE: DEFORMABLE SCAFFOLDING MULTICELLULAR STENT

SERIAL NUMBER: 09933295

FILING DATE: 08/20/2001

PATENT NUMBER: 6613081

ISSUE DATE: 09/02/2003

TITLE: DEFORMABLE SCAFFOLDING MULTICELLULAR STENT

SERIAL NUMBER: 09179737

FILING DATE: 10/27/1998

PATENT NUMBER: 6379319

ISSUE DATE: 04/30/2002

TITLE: SYSTEMS AND METHODS FOR DIRECTING AND SNARING GUIDEWIRES

SERIAL NUMBER: 06504141 (P)
PATENT NUMBER: 4774949 (P)
TITLE: DEFLECTOR GUIDING CATHETER

FILING DATE: 06/14/1983 ISSUE DATE: 10/04/1988

SERIAL NUMBER:

FILING DATE: ISSUE DATE:

PATENT NUMBER:

PCT NUMBER: US0308015

TITLE:

FILING DATE:

PATENT NUMBER:

SERIAL NUMBER:

ISSUE DATE:

PCT NUMBER: US0311284

TITLE:

* per our TVI REONSS
THERE IF NO PRICET FILE
- SEE FUGARTY AGREEMENTS

SHARON LATIMER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office 102681675 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2.26-64 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): TransVascular, Inc. 1505-D Adams Drive Medtronic Vascular, Inc. Menlo Park, CA 94025 3576 Unocal Place Santa Rosa, CA 95403 Additional name(s) of conveying party(ies) attached? □ Yes ☑ No A Delaware corporation. 3. Nature of conveyance: □ Merger □ Change of Name □ Security Agreement □ Other Execution Date: September 9, 2003 4. Application number(s) or patent number(s): See Attached Exhibit A & B If this document is being filed together with a new application, the filing date of the application is: [Inventor Declaration Execution Date] A. Patent Application No.(s): 09/708,923;10/425,543;60/005,164;09/181,701;10/640,998;60/01 6,190,353;6,655,386;5,830,222;6,283,983;6,068,638;6,159,225; 0,614;10/425,756;60/028,922;08/837,295;09/710,332;09/994,222; 6,231,587;6,567,311;6,616,675;6,302,875;6,638,293;6,071,292; 10/150,306;10/436,016;09/912,122;10/259,210; 09/911,975; 6,287,317;6,491,707;5,193,546;6,432,127;6,561,998;6,544,230; 09/845,372;10/346,556;10/370,429;10/033,836; 6,375,615;6,589,164;6,508,824;5,830,224;6,099,542;6,669,709; 09/538,119;09/960,003;09/613,675;09/320,172;09/794,297; 6,126,649;6,015,504;5,655,548;6,447,539;6,186,972;5,824,071; 10/466,622;10/458,153;10/467,274;09/860,147;10/370,201; 6,569,145;5,824,071; 6,602,241; 6,283,951; 6,330,884; 6,613,081; 10/391,481;PCT/US03/08015;10/411,891;PCT/US03/11284; 6,379,319; and 4,774,949 60/455,015;09/826,049;10/617,105;09/748,109; 09/539,639; 09/179,737 and 10/136,929 Additional numbers attached? □ Yes No 5. Name and address of party to whom correspondence concerning 6. Total number of applications and patents involved: 79 document should be mailed: Robert D. Buyan Stout, Uxa, Buyan & Mullins, LLP 7. Total Fee (37 CFR 3.41).....\$3,160.00 4 Venture, Suite 300 ■ Enclosed (Check No. 3333) Irvine, CA 92618 Authorized to be charged to deposit account if fee is insufficient. 8. Deposit account number: 50-0878 (Attach duplicate copy of this page if paying by deposit account.) DO NOT USE THIS SPACE Attorney Docket No. MEDTR-000 9. Statement and signature. To the best of my knowledge and belief, the foregoing is true and attached copy is a true copy of the original document. February 24, 2004 Robert D. Buyan Date Name of Person Signing

Fotal number of pages including cover sheet, attachments and document: [Total No. pages 20]

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PATENT ASSIGNMENT

WHEREAS, TransVascular, Inc., a California corporation ("Assignor"), is the owner of the United States patents and patent applications identified on Exhibit A and of the foreign patents and patent applications identified on the attached Exhibit B; and

WHEREAS, Medtronic AVE, Inc., a Delaware corporation, ("Assignee") desires to acquire the entire right, title and interest in and to the United States and foreign patents and patent applications and in and to the inventions described and claimed therein;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor hereby sells, assigns and transfers to Assignee, its successors and assigns: the entire right, title and interest in and to the patents and patent applications listed on Exhibits A and B hereto including the inventions therein described and claimed; all rights for past infringement thereof; all renewals, reissues, extensions, substitutions, continuations, continuations-in-part, or divisions thereof, or any applications that claim any priority rights thereof; all foreign applications based thereon; and the right to apply for patents in foreign countries in its own name, including the right to claim any priority rights to which such foreign applications are entitled under international conventions, treaties, or otherwise.

Assignor further agrees to execute and deliver without further consideration any further application, assignments or other documents and to perform such other lawful acts as Assignee, its successors and assigns may deem reasonably necessary to fully secure, maintain and enforce its rights, title or interest as specified herein.

Assignor hereby authorizes and requests the appropriate patent offices to issue to Assignee any patents that may be granted in accordance with this Assignment.

By: Name Printed: NBH/Conspers

STATE OF CALIFORNIA

COUNTY OF Santa Clara

On September ______, 2003, before me, _______, personally appeared _______, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[SEAL]

SHARON M. BARBOUR
Commission # 1326945
Notary Public - California
Santa Clara County
My Comm. Expires Nov 21, 2005

Notary Signature

Exhibit A U.S. Patents and Patent Applications

Outside #	Title	Serial#	Filing Type	Date Filed	Status
TRNSV-018Z	Deflector Guiding Catheter	06/504,141	Parent	14-Jun-83	Issued 4,774,949
TRNSV-020A	Coronary Intravascular Ultrasound Imaging Method and Apparatus	07/700,625	Parent	15-May-91	Issued 5,193,546
TRNSV-054A	Method for Treatment of Ischemic Heart Disease by Providing Transvenous Myocardia Perfusion	08/714,466 l	Parent	16-Sep-96	Issued 5,655,548
TRNSV-054G	Apparatus for Treatment of Ischemic Heart Disease by Providing Transvenous Myocardia Perfusion	08/798,700 l	Divisional	12-Feb-97	Issued 5,824,071
TRNSV-003A	A Device, System and Method for Interstitial Transvascular Intervention	08/730,496	Parent	11-Oct-96	Issued 5,830,222
TRNSV-046A	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre- Chosen Anatomic Site In-Vivo	08/616,588	Parent	15-Mar-96	Issued 5,830,224
TRNSV-052A	Device for Forming Holes in Tissue	09/009,135	Parent	20-Jan-98	Issued
212/047	Transvascular TMR Device and Method	08/745,869	Parent	8-Nov-96	6,015,504 Issued 6,042,581
212/067	Transvascular TMR Device and Method	08/819,948	CIP	18-Mar-97	Issued
TRNSV-003C	Methods for Interstitial Transvascular Intervention and Revascularization	09/179,809	Continuation	27-Oct-98	6,053,911 Issued 6,068,638
TRNSV-017A	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	08/896,307	Parent	28-Jun-97	Issued 6,071,292
TRNSV-046G1	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre- Chosen Anatomic Site In-Vivo	09/134,995	Divisional	17-Aug-98	Issued 6,099,542
TRNSV-051A	Steerable Catheter with External Guidewire As Catheter Tip Deflector	09/329,386	Parent	10-Jun-99	Issued 6,126,649
TRNSV-003G2	Device for Interstitial Transvascular Intervention and Revascularization	09/181,013	Divisional	27-Oct-98	Issued 6,159,225
TRNSV-054B/B2	2 Methods and Apparatus for Treating Ischemic Heart Disease by providing Transvenous Myocardial Perfusion	09/208,807	CIP	9-Dec-98	Issued 6,186,972
TRNSV-001A	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	108/730,327	Parent	11-Oct-96	Issued 6,190,353
TRNSV-003G3	Devices for Connecting Anatomical Conduits such as Vascular Structures	09/267,943	Divisional	11-Mar-99	Issued 6,231,587

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-003B	Percutaneous In Situ Coronary Bypass Method and Apparatus	09/192,554	Parent	10-Aug-98	Issued 6,283,983
14768-7001	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	09/048,147	CIP	25-Mar-98	Issued 6,283,951
TRNSV-017G	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	09/543,251	Divisional	5-Apr-00	Issued 6,287,317
TRNSV-015A	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	08/837,294	CIP	11-Apr-97	Issued 6,302,875
14768-7002	Deformable Scaffolding Multicellular Stent	09/089,032	CIP	2-Jun-98	Issued 6,330,884
TRNSV-029A	Tissue Penetrating Catheters having Integral Imaging Transducers and their Methods of Use	09/282,774	Parent	30-Jul-99	Issued 6,375,615
14768-7004	Systems and Methods for Directing and Snaring Guidewires	09/179,737	CIP	27-Oct-98	Issued 6,379,319
TRNSV-022A	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	08/970,694	CIP	14-Nov-97	Issued 6,432,127
TRNSV-054B	Methods and Apparatus for Treating Ischemic Heart Disease by Providing Transvenous Myocardial Perfusion	08/929,076	CIP	15-Sep-97	Issued 6,447,539
TRNSV-017G2	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	09/908,337	Continuation	18-Jul-01	Issued 6,491,707
TRNSV-028A	Catheters, Systems and Methods for Percutaneous In Situ Arterio-Venous Bypass	09/282,276	Parent	31-Mar-99	Issued 6,544,230
TRNSV-024A	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	09/056,589	Parent	7-Apr-98	Issued 6,561,998
TRNSV-014US	Methods and Apparatus for Connecting Openings Formed in Adjacent Blood Vessels or Other Anatomical Structures	09/117,520	US/PCT	29-Jul-98	Issued 6,616,675
TRNSV-016US	Methods and Apparatus for Blocking Flow Through Blood Vessels	09/117,516	Parent	29-Jul-98	Pending Allowed
TRNSV-016US-C	Methods and Apparatus for Blocking Flow Through Blood Vessels	TBD	Divisional	29-Aug-03	Pending
TRNSV-005US	A Device, System and Method for Interstitial Transvascular Intervention	09/117,515	Parent	2-Aug-98	Issued 6,567,311
TRNSV-003G1	System and Method for Delivery of Therapeutic Agents to Intracorporeal Sites	09/181,701	Divisional	28-Oct-98	Pending Allowed
TRNSV-003G1-C	System and Method for Delivery of Therapeutic Agents to Intracorporeal Sites	TBD	Continuation	5-Aug-03	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-056A	Pressure-Controlled Continuous Coronary Sinus Occlusion Device and Methods of Use	09/275,797	Parent	25-Mar-99	Issued 6,569,145
TRNSV-037A	Sterility Barriers for Insertion of Non-Sterile Apparatus Into Catheters or Other Medical Devices	09/505,149	Parent	15-Feb-00	Issued 6,589,164
TRNSV-043A	Catheter-Based Methods, Apparatuses and Systems for Enlarging Blood Vessels to Facilitate the Formation of Penetration Tracts, Fistulas and/or Blood Flow Channels	09/507,139	Parent	18-Feb-00	Issued 6,508,824
212/247	Transvascular TMR Device and Method	09/557,628	Continuation	25-Apr-00	Pending
TRNSV-001G	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	09/639,963	Divisional	16-Aug-00	Pending
TRNSV-057A	Methods and Apparatus for Acute or Chronic Delivery of Substances or Apparatus to Extravascular Treatment Sites	09/766,502	Parent	17-Jan-01	Issued 6,602,241
TRNSV-057C	Methods and Apparatus for Acute or Chronic Delivery of Substances or Apparatus to Extravascular Treatment Sites	TBD	Continuation	10-Jun-03	Pending
TRNSV-065A	Methods for Bypassing Total or Near-Total Obstructions in Arteries or other Anatomical Conduits	09/860,147	CIP	17-May-01	Pending
24768-7013	Apparatus and Methods for Creating a Channel Between Adjacent Body Lumens	09/539,639	Parent	30-Mar-00	Pending
212/481	Transvascular TMR Device and Method	TBA	Continuation	15-May-03	Pending
TRNSV-055B/B2	Apparatus for Providing Coronary Retroperfusion and Methods of Use	09/320,172	CIP	26-May-99	Pending
14768-7003	Over-The-Wire Apparatus and Method for Open Surgery Making of a Fluid Connection Between Two neighboring Vessels	09/478,109	Parent	4-Jan-00	Pending
212/245	TransVascular TMR Device and Method	09/536,622	Continuation	28-Mar-00	Pending
TRNSV-044A	Stabilized Tissue Penetrating Catheters	09/538,119	CIP	29-Mar-00	Pending
TRNSV-053A	Transluminally Deliverable Vascular Blockers and Methods for Facilitating Retrograde Flow or Arterial Blood through Veins		Parent	11-Jul-00	Pending
TRNSV-001C	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	109/708,932	Continuation	18-Nov-00	Pending
TRNSV-013BC	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	09/710,332	Continuation	9-Nov-00	Pending
TRNSV-055C	Apparatus for Providing Coronary Retroperfusion and/or Left Ventricular Assist and Methods of Use	09/794,297	Continuation	27-Feb-01	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
24768-7021	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	09/826,049	Divisional	3-Apr-01	Pending
TRNSV-022C	Devices for Forming and/or Maintaining Connections Between Openings in an Anatomical Conduits	09/845,372	Continuation	30-Apr-01	Pending
TRNSV-015G	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	09/912,122	Divisional	24-Jul-01	Pending
TRNSV-022G	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	09/911,975	Divisional	24-Jul-01	Pending
7030190001	Deformable Scaffolding Multicellular Stent	09/933,295	Divisional	20-Aug-01	Pending
TRNSV-046G2C	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre- Chosen Anatomic Site In-Vivo	09/960,003	Continuation	21-Sep-01	Pending
TRNSV-013BC2	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	09/994,222	Continuation	· 26-Nov-01	Pending
TRNSV-029C	Tissue penetrating catheters having integral imaging transducers and their methods of use	10/033,836	Continuation	26-Dec-01	Pending/ Allowed
273/098	Systems and Methods for Directing and Snaring Guidewires	10/136,929	Divisional	30-Apr-02	Pending
TRNSV-013BC3	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10/150,306	Continuation	16-May-02	Pending
TRNSV-017G3	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Luminal Anatomic	10/259,210	Divisional	27-Sep-02	Pending
TRNSV-024C	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	10/346,556	Continuation	17-Jan-03	Pending
TRNSV-065C PAOLS CONZ	Methods for Bypassing Total or Near-Total Obstructions in Arteries or other Anatomical Conduits		Continuation 3/	19-Feb-03	Pending
TRNSV-028G	Catheters, Systems and Methods for Percutaneous In Situ Arterio-Venous Bypass	10/370,429	Divisional	20-Feb-03	Pending
TRNSV-096N	Optically Guided Penetration Catheters and Their Methods of Use	60/455,015	Provisional	13-Mar-03	Pending
TRNSV-083A	Implantable Lumen Occluding Devices and Methods	10/391,481	Parent	17-Mar-03	Pending
TRNSV-086A	Devices and Methods for Transluminal - Interstitial Electrode Placement	10/411,891	Parent	11-Apr-03	Pending
TRNSV-001G2	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	10/425,543	Divisional	29-Apr-03	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-005C	A Device, System and Method for Interstitial Transvascular Intervention	10/425,756	Continuation	29-Apr-03	Pending
TRNSV-014C	Methods and Apparatus for Connecting Openings Formed in Adjacent Blood Vessels or Other Anatomical Structures	10/436,016	Continuation	12-May-03	Pending
TRNSV-064PC	Methods and Apparatus for Guided Transluminal Interventions using Vessel Wall Penetrating Catheters and other Apparatus	PCT/US02/ 03941	PCT	6-Feb-02	Pending
TRNSV-083PC	7	PCT/US03/ 08015	PCT	17-Mar-03	Pending
TRNSV-086PC	Devices and Methods for Transluminal - Interstitial Electrode Placement	PCT/US03/ 11284	PCT	11-Apr-03	Pending
TRNSV-052A	Device for Forming Holes in Tissue	09/009,135	Parent	20-Jan-98	Issued
TRNSV-051A	Steerable Catheter with External Guidewire As Catheter Tip Deflector	09/329,386	Parent	10-Jun-99	Issued 6,015,504
TRNSV-020A	Coronary Intravascular Ultrasound Imaging Method and Apparatus	07/700,625	Parent	15-Mar-91	Issued 6,126,649
TRNSV-003A	A Device, System and Method for Interstitial Transvascular Intervention	08/730,496	Parent	11-Oct-96	Issued 5,830,222
TRNSV-003C	Methods for Interstitial Transvascular Intervention and Revascularization	09/179,809	Continuation	27-Oct-98	Issued 6,068,638
TRNSV-003G2	Device for Interstitial Transvascular Intervention and Revascularization	09/181,013	Divisional	27-Oct-98	Issued 6,159,225
TRNSV-001A	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	. 08/730,327	Parent	11-Oct-96	Issued 6,190,353
TRNSV-003G3	Devices for Connecting Anatomical Conduits such as Vascular Structures	09/267,943	Divisional	26-Feb-99	Issued 6,231,587
TRNSV-015A	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	08/837,294	CIP	11-Apr-97	Issued 6,302,875
TRNSV-029A	Tissue Penetrating Catheters having Integral Imaging Transducers and their Methods of Use	09/282,774 e	Parent	31-Mar-99	Issued 6,375,615
14768-7004	Systems and Methods for Directing and Snaring Guidewires	09/179,737	CIP	27-Oct-98	Issued 6,379,319
TRNSV-028A	Catheters, Systems and Methods for Percutaneous In Situ Arterio-Venous Bypass	09/282,276	Parent	31-Mar-99	Issued 6,544,230
TRNSV-024A	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	09/056,589	Parent	7-Apr-98	Issued 6,561,998
TRNSV-014US	Methods and Apparatus for Connecting Openings Formed in Adjacent Blood Vessels or Other Anatomical Structures	09/117,520	Parent Parent	29-Jul-98	Issued 6,616,675
TRNSV-005US	A Device, System and Method for Interstitial Transvascular Intervention	09/117,515	Parent	2-Aug-98	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-003G1	System and Method for Delivery of Therapeutic Agents to Intracorporeal Sites	09/181,701	Divisional	27-Oct-98	Pending
TRNSV-001G	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	09/639,963	Divisional	16-Aug-00	Pending
24768-7013	Apparatus and Methods for Creating a Channel Between Adjacent Body Lumens	09/539,639	Parent	30-Mar-00	Pending
14768-7003	Over-The-Wire Apparatus and Method for Open Surgery Making of a Fluid Connection Between Two neighboring Vessels	09/478,109	Parent	4-Jan-00	Pending
TRNSV-001C	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	09/708,932	Continuation	18-Nov-00	Pending
TRNSV-013BC	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	09/710,332	Continuation	9-Nov-00	Pending
TRNSV-015G	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	09/912,122	Divisional	24-Jul-01	Pending
TRNSV-013BCC	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	09/994,222	Continuation	26-Nov-01	Pending
TRNSV-029C	Tissue penetrating catheters having integral imaging transducers and their methods of use	10/033,836	Continuation	26-Dec-01	Pending
273/098	Systems and Methods for Directing and Snaring Guidewires	10/136,929	Divisional	30-Apr-02	Pending
TRNSV-013BC3	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10/150,306	Continuation	16-May-02	Pending
TRNSV-024C	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	10/346,556	Continuation	17-Jan-03	Pending
TRNSV-028G	Catheters, Systems and Methods for Percutaneous In Situ Arterio-Venous Bypass	TBA	Divisional	20-Feb-03	Pending
TRNSV-001G2	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	TBA	Divisional	29-Apr-03	Pending
TRNSV-005C	A Device, System and Method for Interstitial Transvascular Intervention	ТВА	Continuation	29-Apr-03	Pending
TRNSV-014C	Methods and Apparatus for Connecting Openings Formed in Adjacent Blood Vessels or Other Anatomical Structures	TBA	Continuation	12-May-03	Pending
TRNSV-020A	Coronary Intravascular Ultrasound Imaging Method and Apparatus	07/700,625	Parent	15-Mar-91	Issued 5,193,546
TRNSV-052A	Device for Forming Holes in Tissue	09/009,135	Parent	20-Jan-98	Issued 6,015,504
TRNSV-051A	Steerable Catheter with External Guidewire As Catheter Tip Deflector	309/329,386	Parent	10-Jun-99	Issued 6,126,649

Exhibit B
Foreign Patents and Patent Applications

Outside #	Title	Serial #	Filing Type	Date Filed	Status
14768-7006	Deformable Scaffolding Multicellular Stent	2333764	Foreign	13-May-99	Pending
14768-7009	Deformable Scaffolding Multicellular Stent	2000-551692	Foreign	13-May-99	Pending
14768-7011	Apparatus for Creating a Channel between Adjacent Body Lumens	2395246	Foreign	3-Jan-01	Pending
14768-7014	Apparatus for Creating a Channel between Adjacent Body Lumens	26288/01	Foreign	3-Jan-01	Pending
212/047EP	Transvascular TMR Device and Method	97949393.9	Foreign	7-May-99	Pending
233/023CA	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	2325032	Foreign	21-Sep-00	Pending
233/023EP	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	99909978.1	Foreign	22-Sep-00	Pending
233/023IL	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	138298	Foreign	22-Sep-00	Pending
233/023JP	Systems and Methods for Delivery Drugs to Selected Locations within the Body	2000-537589	Foreign	22-Sep-00	Pending
233/023MX	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	009335	Foreign	22-Sep-00	Pending
234/149AU2	Deformable Scaffolding Multicellular Stent	2002302040	Foreign	15-Nov-02	Pending
234/149EP	Deformable Scaffolding Multicellular Stent	99925626.6	Foreign	13-May-99	Pending
259/301EP	Apparatus for Creating a Channel between Adjacent Body Lumens	TBA	Foreign	3-Jan-01	Pending
259/301ЛР	Apparatus for Creating a Channel between Adjacent Body Lumens	2001-549556	Foreign .	3-Jan-01	Pending
TRNSV-001AUG	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	123046/01	Foreign/ Divisional	16-Feb-01	Pending
TRNSV-001CA	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	12234361	Foreign	8-Apr-98	Pending
TRNSV-001CH	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	196199063.5	Foreign	11-Jun-98	Pending
TRNSV-001EP	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	1969336499.1	l Foreign	13-Apr-98	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-001GEP	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	11120160.5	Foreign/ Divisional	22-Aug-01	Pending
TRNSV-001IS	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	1124038	Foreign	9-Apr-98	Pending
TRNSV-001GIS	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	1151563	Foreign/ Divisional	2-Sep-02	Pending
TRNSV-001JP	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	19/515,288	Foreign	13-Apr-98	Pending
TRNSV-001MX	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	1982870	Foreign	13-Apr-98	Pending
TRNSV-001RU	Methods and Apparatus for Bypassing Arteria Obstructions and/or Performing Other Transvascular Procedures	198108600	Foreign	10-Apr-98	Pending
TRNSV-003AUG	A Device, System and Method for Interstitial Transvascular Intervention	40303/01	Foreign/ Divisional	30-Apr-01	Pending
TRNSV-003CA	A Device, System and Method for Interstitial Transvascular Intervention	2234389	Foreign	6-Jun-98	Pending
TRNSV-003CH	A Device, System and Method for Interstitial Transvascular Intervention	96198967.X	Foreign	13-Apr-98	Pending
TRNSV-003EP	A Device, System and Method for Interstitial Transvascular Intervention	96938622.6	Foreign	13-May-98	Pending
TRNSV-003EPG	A Device, System and Method for Interstitial Transvascular Intervention	03003995.2	Foreign/ Divisional	24-Feb-03	Pending
TRNSV-003IL	A Device, System and Method for Interstitial Transvascular Intervention	124037	Foreign	9-Apr-98	Pending
TRNSV-003JP	A Device, System and Method for Interstitial Transvascular Intervention	9-515211	Foreign	10-Apr-98	Pending
TRNSV-003MX	A Device, System and Method for Interstitial Transvascular Intervention	982872	Foreign	13-Apr-98	Pending
TRNSV-003RU	A Device, System and Method for Interstitial Transvascular Intervention	98108466	Foreign	13-Apr-98	Pending
TRNSV-005AUG	A Device, System and Method for Interstitial Transvascular Intervention	57962/01	Foreign/ Divisional	10-Aug-01	Pending
TRNSV-005CA	A Device, System and Method for Interstitial Transvascular Intervention	2244066	Foreign	24-Jul-98	Pending
TRNSV-005CH	A Device, System and Method for Interstitial Transvascular Intervention	97193556.4	Foreign	2-Aug-98	Pending

Outside #	Title	Serial#	Filing Type	Date Filed	Status
TRNSV-005EP	A Device, System and Method for Interstitial Transvascular Intervention	97904081.3	Foreign	2-Aug-98	Pending
TRNSV-005IL	A Device, System and Method for Interstitial Transvascular Intervention	125415	Foreign	21-Jul-98	Pending
TRNSV-005JP	A Device, System and Method for Interstitial Transvascular Intervention	9-527804	Foreign	31-Jul-98	Pending
TRNSV-005MX	A Device, System and Method for Interstitial Transvascular Intervention	986138	Foreign	30-Jul-98	Pending
TRNSV-013AUG	Methods and Apparatus for Transmyocardial Revascularization	34403/02	Foreign	18-Apr-02	Pending
TRNSV- 013BAUG	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	42371/02	Foreign	20-May-02	Pending
TRNSV-013BCA	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	2284720	Foreign	23-Sep-99	Pending
TRNSV-013BEP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	98915524.7	Foreign	23-Nov-99	Pending
TRNSV-013BIL	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	132195	Foreign	4-Oct-99	Pending
TRNSV-013BJP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10-544160	Foreign	7-Oct-99	Pending
TRNSV-013BMX	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	949273	Foreign	11-Oct-99	Pending
TRNSV-013CA	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	2263672	Foreign	18-Feb-99	Pending
TRNSV-013EP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	97940595.8	Foreign	2-Mar-99	Pending
TRNSV-013JP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10-511753	Foreign	25-Feb-99	Pending
TRNSV-013MX	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	991847	Foreign	25-Feb-99	Pending
TRNSV-014CA	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	2244079	Foreign	2-Aug-98	Pending
TRNSV-014CH	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	97193245.X	Foreign	2-Aug-98	Pending
TRNSV-014EP	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	97904086.2	Foreign	2-Aug-98	Pending
TRNSV-014IL	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	125416	Foreign	20-Jul-98	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-014JP	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	9-527810	Foreign	27-Jul-98	Pending
TRNSV-014MX	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	986192	Foreign	31-Jul-98	Pending
TRNSV-015CA	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	2285001	Foreign	28-Sep-99	Pending
TRNSV-015EP	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	98920833.5	Foreign	30-Sep-99	Pending
TRNSV-015IL	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	132197	Foreign	4-Oct-99	Pending
TRNSV-015JP	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	10-544059	Foreign	12-Oct-99	Pending
TRNSV-015MX	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	999274	Foreign	11-Oct-99	Pending
TRNSV-016AUG	Methods and Apparatus for Blocking Flow Through Blood Vessels	35101/01	Foreign/ Divisional	10-Apr-01	Pending
TRNSV-016CA	Methods and Apparatus for Blocking Flow Through Blood Vessels	2244080	Foreign	24-Jul-98	Pending
TRNSV-016CH	Methods and Apparatus for Blocking Flow Through Blood Vessels	97193313.8	Foreign	2-Aug-98	Pending
TRNSV-016EP	Methods and Apparatus for Blocking Flow Through Blood Vessels	97904084.7	Foreign	2-Aug-98	Pending
TRNSV-016IL	Methods and Apparatus for Blocking Flow Through Blood Vessels	125417	Foreign	20-Jul-98	Pending
TRNSV-016JP	Methods and Apparatus for Blocking Flow Through Blood Vessels	9-527807	Foreign	31-Jul-98	Pending
TRNSV-016MX	Methods and Apparatus for Blocking Flow Through Blood Vessels	986137	Foreign	30-Jul-98	Pending
TRNSV-017AU	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Lumenal Anatomic	81712/98	Foreign	25-Jun-98	Pending
TRNSV-017CA	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Lumenal Anatomic	2295133	Foreign	24-Dec-99	Pending
TRNSV-017EP	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Lumenal Anatomic	98-931643.5	Foreign	4-Jan-00	Pending
TRNSV-017IL	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Lumenal Anatomic	133670	Foreign	23-Dec-99	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-017JP	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Lumenal Anatomic	11-505072	Foreign	28-Dec-99	Pending
TRNSV-017MX	Transluminal Methods and Devices for Closing, Forming Attachments to, and/or Forming Anastomotic Junctions in, Lumenal Anatomic	9911715	Foreign	15-Dec-99	Pending
TRNSV-022AU	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	13928/99	Foreign	12-May-00	Pending
TRNSV-022AUG	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	2003-200888	3 Foreign/ Divisional	5-Mar-03	Pending
TRNSV-022CA	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	2308475	Foreign	3-May-00	Pending
TRNSV-022EP	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	98957744-0	Foreign	4-May-00	Pending
TRNSV-022IL	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	135918	Foreign	12-May-00	Pending
TRNSV-022JP	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	2000-52071	1 Foreign	12-May-00	Pending
TRNSV-024AU	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	2845968	Foreign	6-Oct-00	Pending/ Allowed
TRNSV-024CA	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	2326769	Foreign	28-Sep-00	Pending
TRNSV-024EP	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	99916412.2	Foreign	27-Sep-00	Pending
TRNSV-024IL	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	138724	Foreign	27-Sep-00	Pending
TRNSV-024JP	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	2000-54193	8 Foreign	6-Oct-00	Pending
TRNSV-024MX	Transhuminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	009748	Foreign	5-Oct-00	Pending
TRNSV-028AU	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	35477/99	Foreign	31-Mar-99	Pending
TRNSV-028CA	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	2324304	Foreign	18-Sep-00	Pending
TRNSV-028EP	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	99917329.7	Foreign	31-Mar-99	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-028IL		138666	Foreign	25-Sep-00	Pending
	Percutaneous in Situ Arterio-Venous Bypass				
TRNSV-028JP	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	2000-540765	Foreign	2-Oct-00	Pending
TRNSV-028MX	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	9499	Foreign	28-Sep-00	Pending
TRNSV-029AU	Tissue penetrating catheters having integral imaging transducers and their methods of use	34594/99	Foreign	31-Маг-99	Pending
TRNSV-029CA	Tissue penetrating catheters having integral imaging transducers and their methods of use	2324210	Foreign	31-Mar-99	Pending
TRNSV-029EP	Tissue penetrating catheters having integral imaging transducers and their methods of use	99916238.1	Foreign	31-Mar-99	Pending
TRNSV-029IL	Tissue penetrating catheters having integral imaging transducers and their methods of use	TBA	Foreign	25-Sep-00	Pending
TRNSV-029JP	Tissue penetrating catheters having integral imaging transducers and their methods of use	2000-540872	Poreign	29-Sep-00	Pending
TRNSV-029MX	Tissue penetrating catheters having integral imaging transducers and their methods of use	9497	Foreign	28-Sep-00	Pending
TRNSV-046CA	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre- Chosen Anatomic Site In-Vivo	2249237	Foreign	15-Sep-98	Pending
TRNSV-046EP	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre- Chosen Anatomic Site In-Vivo	97907789.8	Foreign	15-Oct-98	Pending .
TRNSV-046JP	Catheter Apparatus and Methodology for Generating a Fistula On-Demand Between Closely Associated Blood Vessels at a Pre- Chosen Anatomic Site In-Vivo	532616/97	Foreign	14-Sep-98	Pending
TRNSV-052AU	Device for forming holes in Tissue	58349/99	Foreign	8-Nov-99	Pending
TRNSV-052CA	Device for forming holes in Tissue	2290159	Foreign	16-Nov-99	Pending
TRNSV-052JP	Device for forming holes in tissue	352192/99	Foreign	5-Nov-99	Pending
TRNSV-052NO	Device for forming holes in tissue	19995739	Foreign	23-Nov-99	Pending
TRNSV-054AUG	Apparatus for Treating Ischemic Heart Disease by Providing Transvenous Myocardia Perfusion	91329/01 I	Foreign/ Divisional	14-Nov-01	Pending
TRNSV-054CA	Apparatus for Treating Ischemic Heart Disease by Providing Transvenous Myocardia Perfusion	2265775 l	Foreign	15-Mar-99	Pending
TRNSV-054EP	Apparatus for Treating Ischemic Heart Disease by Providing Transvenous Myocardia Perfusion	97941665.8 I	Foreign	30-Mar-99	Pending
TRNSV-054JP	Apparatus for Treating Ischemic Heart Disease by Providing Transvenous Myocardia Perfusion	10-513996 l	Foreign	16-Mar-99	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-056AU	Pressure-Controlled Continuous Coronary Sinus Occlusion Device and Methods of Use	39137/00	Foreign	24-Sep-01	Pending
TRNSV-056CA	Pressure-Controlled Continuous Coronary Sinus Occlusion Device and Methods of Use	2368163	Foreign	18-Sep-01	Pending
TRNSV-056EP	Pressure-Controlled Continuous Coronary Sinus Occlusion Device and Methods of Use	918304.7	Foreign	27-Sep-01	Pending
TRNSV-056JP	Pressure-Controlled Continuous Coronary Sinus Occlusion Device and Methods of Use	2000-606288	Foreign	25-Sep-01	Pending
14768-7010	Deformable Scaffolding Multicellular Stent	41875/99	Foreign	13-May-99	Issued
TRNSV-001AU	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	74316-96	Foreign	8-Apr-98	Issued 726713
TRNSV-001SI	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	9802432-6	Foreign	13-Apr-98	Issued 52000
TRNSV-003AU	A Device, System and Method for Interstitial Transvascular Intervention	76953/96	Foreign	8-Apr-98	Issued 729466
TRNSV-003SI	A Device, System and Method for Interstitial Transvascular Intervention	9802498-7	Foreign	13-Apr-98	Issued 52058
TRNSV-005AU	A Device, System and Method for Interstitial Transvascular Intervention	18471/97	Foreign	23-Jul-98	Issued 73341
TRNSV-013AU	Methods and Apparatus for Transmyocardial Revascularization	42340/97	Foreign	25-Aug-97	Issued 743142
TRNSV-013BAU	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	69686/98	Foreign	25-Oct-99	Issued 744343
TRNSV-014AU	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	18473/97	Foreign	23-Jul-98	Issued 723785
TRNSV-015AU	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	73581/98	Foreign	29-Oct-99	Issued 749373
TRNSV-016AU	Methods and Apparatus for Blocking Flow Through Blood Vessels	18472/97	Foreign	23-Jul-98	Issued 733332
212/047AU	Transvascular TMR Device and Method	730720	Foreign	10-Nov-97	Pending
24768-7015	Systems and Methods for Delivering Drugs to Selected Locations Within the Body	29054/99	Foreign	17-Mar-99	Pending
TRNSV-022MX	Devices for Forming and/or Maintaining Connections Between Adjacent Anatomical Conduits	004542	Foreign	11-May-00	Pending
TRNSV-052AU	Device for forming holes in Tissue	58349/99	Foreign	8-Nov-99	Pending
TRNSV-052CA	Device for forming holes in Tissue	2290159	Foreign	16-Nov-99	Pending
TRNSV-052JP	Device for forming holes in tissue	352192/99	Foreign	5-Nov-99	Pending
TRNSV-052NO	Device for forming holes in tissue	19995739	Foreign	23-Nov-99	Pending

Outside#	Title	Serial #	Filing Type	Date Filed	Status
14768-7006	Deformable Scaffolding Multicellular Stent	2333764	Foreign	13-May-99	Pending
14768-7009	- U	2000- 551692	Foreign	13-May-99	Pending
14768-7011		2395246	Foreign	3-Jan-01	Pending
14768-7014	Apparatus for Creating a Channel between Adjacent Body Lumens	26288/01	Foreign	1-Mar-01	Pending
234/149AU2	Deformable Scaffolding Multicellular Stent	2002302040	Foreign	15-Nov-02	Pending
234/149EP	Deformable Scaffolding Multicellular Stent	99925626.6	Foreign	13-May-99	Pending
259/301EP	Apparatus for Creating a Channel between Adjacent Body Lumens	ТВА	Foreign	3-Jan-01	Pending
259/301JP	Apparatus for Creating a Channel between Adjacent Body Lumens	2001- 549556	Foreign	3-Jan-01	Pending
TRNSV-001AUG	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	23046/01	Foreign	26-Feb-01	Pending
TRNSV-001CA	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	2234361	Foreign	8-Apr-98	Pending
TRNSV-001CH	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	96199063.5	Foreign	13-Apr-98	Pending
TRNSV-001EP	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	969336499.1	Foreign	13-Apr-98	Pending
TRNSV-001GEP	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	1120160.5	Foreign	22-Aug-01	Pending
TRNSV-001GIS	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	151563	Foreign	2-Sep-02	Pending
TRNSV-001IS	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	124038	Foreign	9-Apr-98	Pending
TRNSV-001JP	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	09/515,288	Foreign	13-Apr-98	Pending
TRNSV-001MX	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	982870	Foreign	13-Apr-98	Pending
TRNSV-001RU	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	98108600	Foreign	13-Apr-98	Pending

Outside#	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-003AUG	A Device, System and Method for Interstitial Transvascular Intervention	40303/01	Foreign	30-Apr-01	Pending
TRNSV-003CA	A Device, System and Method for Interstitial Transvascular Intervention	2234389	Foreign	8-Apr-98	Pending
TRNSV-003CH	A Device, System and Method for Interstitial Transvascular Intervention	96198967.X	Foreign	13-Apr-98	Pending
TRNSV-003EP	A Device, System and Method for Interstitial Transvascular Intervention	96938622.6	Foreign	13-Apr-98	Pending
TRNSV-003IL	A Device, System and Method for Interstitial Transvascular Intervention	124037	Foreign	9-Apr-98	Pending
TRNSV-003JP	A Device, System and Method for Interstitial Transvascular Intervention	9-515211	Foreign	10-Apr-98	Pending
TRNSV-003MX	A Device, System and Method for Interstitial Transvascular Intervention	982872	Foreign	13-Apr-98	Pending
TRNSV-003RU	A Device, System and Method for Interstitial Transvascular Intervention	98108466	Foreign	13-Apr-98	Pending
TRNSV-005AUG	A Device, System and Method for Interstitial Transvascular Intervention	57962/01	Foreign	10-Aug-01	Pending
TRNSV-005CA	A Device, System and Method for Interstitial Transvascular Intervention	2244066	Foreign	2-Aug-98	Pending
TRNSV-005CH	A Device, System and Method for Interstitial Transvascular Intervention	7193556.4	Foreign	2-Aug-98	Pending
TRNSV-005EP	A Device, System and Method for Interstitial Transvascular Intervention	97904081.3	Foreign	2-Aug-98	Pending
TRNSV-005IL	A Device, System and Method for Interstitial Transvascular Intervention	125415	Foreign	2-Aug-98	Pending
TRNSV-005JP	A Device, System and Method for Interstitial Transvascular Intervention	590477	Foreign	2-Aug-98	Pending
TRNSV-005MX	A Device, System and Method for Interstitial Transvascular Intervention	986138	Foreign	30-Jul-98	Pending
TRNSV-013AUG	Methods and Apparatus for Transmyocardial Revascularization	34403/02	Foreign	18-Apr-02	Pending
TRNSV- 013BAUG	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	42371/02	Foreign	20-May-02	Pending
TRNSV-013BCA	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	2284720	Foreign	23-Sep-99	Pending
TRNSV-013BEP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	98915524.7	Foreign	13-Apr-98	Pending
TRNSV-013BIL	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	132195	Foreign	4-Oct-99	Pending

Outside#	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-013BJP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10-544160	Foreign	7-Oct-99	Pending
TRNSV-013BMX	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	949273	Foreign	11-Oct-99	Pending
TRNSV-013CA	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	2263672	Foreign	18-Feb-99	Pending
TRNSV-013EP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	98915524.7	Foreign	26-Aug-96	Pending
TRNSV-013JP	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	10-511753	Foreign	25-Aug-97	Pending
TRNSV-013MX	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	991847	Foreign	25-Feb-99	Pending
TRNSV-014CA	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	2244079	Foreign	2-Aug-98	Pending
TRNSV-014CH	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	97193245.X	Foreign	2-Aug-98	Pending
TRNSV-014EP	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	97904086.2	Foreign	2-Aug-98	Pending
TRNSV-014IL	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	125416	Foreign	2-Aug-98	Pending
TRNSV-014JP	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	592668	Foreign	2-Aug-98	Pending
TRNSV-014MX	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	986192	Foreign	31-Jul-98	Pending
TRNSV-015CA	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	2285001	Foreign	10-Apr-98	Pending
TRNSV-015EP	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	98920833.5	Foreign	30-Sep-99	Pending
TRNSV-015IL	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	132197	Foreign	4-Oct-99	Pending
TRNSV-015JP	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	10-544059	Foreign	27-Aug-01	Pending

Outside #	Title	Serial #	Filing Type	Date Filed	Status
TRNSV-015MX	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	999274	Foreign	10-Apr-98	Pending
TRNSV-024AU	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	34737/99	Foreign	6-Apr-99	Pending
TRNSV-024CA	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	2326769	Foreign	6-Apr-99	Pending
TRNSV-024EP	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	99916412.2	Foreign	27-Feb-00	Pending
TRNSV-024IL	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	138724	Foreign	27-Sep-00	Pending
TRNSV-024JP	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	2000- 541938	Foreign	6-Oct-00	Pending
TRNSV-024MX	Transluminal Devices, Systems and Methods for Enlarging Interstitial Penetration Tracts	9748	Foreign	15-Oct-00	Pending
TRNSV-028AU	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	35477/99	Foreign	31-Mar-99	Pending
TRNSV-028CA	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	2324304	Foreign	18-Sep-00	Pending
TRNSV-028EP	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	99917329.7	Foreign	31-Mar-99	Pending
TRNSV-028IL	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	138666	Foreign	25-Sep-00	Pending
TRNSV-028JP	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	2000- 540765	Foreign	2-Oct-00	Pending
TRNSV-028MX	Catheters, Systems and Methods for Percutaneous in Situ Arterio-Venous Bypass	9499	Foreign	28-Sep-00	Pending
TRNSV-029AU	Tissue penetrating catheters having integral imaging transducers and their methods of use	34594/99	Foreign	31-Mar-99	Pending
TRNSV-029CA	Tissue penetrating catheters having integral imaging transducers and their methods of use	2324210	Foreign	31-Mar-99	Pending
TRNSV-029EP	Tissue penetrating catheters having integral imaging transducers and their methods of use	99916238.1	Foreign .	31-Mar-99	Pending
TRNSV-029IL	Tissue penetrating catheters having integral imaging transducers and their methods of use	TBA	Foreign	25-Sep-00	Pending
TRNSV-029JP	Tissue penetrating catheters having integral imaging transducers and their methods of use	2000- 540872	Foreign	29-Sep-00	Pending
TRNSV-029MX	Tissue penetrating catheters having integral imaging transducers and their methods of use	9497	Foreign	28-Sep-00	Pending
TRNSV-052AU	Device for forming holes in Tissue	58349/99	Foreign	8-Nov-99	Pending
TRNSV-052CA	Device for forming holes in Tissue	2290159	Foreign	16-Nov-99	Pending

Outside#	Title	Serial#	Filing Type	Date Filed	Status
TRNSV-052JP	Device for forming holes in tissue	352192/99	Foreign	5-Nov-99	Pending
TRNSV-052NO	Device for forming holes in tissue	19995739	Foreign	23-Nov-99	Pending
14768-7010	Deformable Scaffolding Multicellular Stent	41875/99	Foreign	13-May-99	Issued
TRNSV-001AU	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	23046/01	Foreign	8-Apr-98	Issued 726713
TRNSV-001SI	Methods and Apparatus for Bypassing Arterial Obstructions and/or Performing Other Transvascular Procedures	9802432-6	Foreign	13-Apr-98	Issued 52000
TRNSV-003AU	A Device, System and Method for Interstitial Transvascular Intervention	75953/96	Foreign	13-Apr-98	Issued 729466
TRNSV-003SI	A Device, System and Method for Interstitial Transvascular Intervention	9802498-7	Foreign	13-Apr-98	Issued 52058
TRNSV-005AU	A Device, System and Method for Interstitial Transvascular Intervention	18471/97	Foreign	23-Jul-98	Issued 733351
TRNSV-013AU	Methods and Apparatus for Transmyocardial Revascularization	PCT/US97/ 14801	Foreign	25-Aug-97	Issued 744343
TRNSV-013BAU	Methods and Apparatus for Transmyocardial Direct Coronary Revascularization	69686/98	Foreign	13-Apr-98	Issued 744343
TRNSV-014AU	Methods and Apparatus for Side to Side Connection of Blood Vessels or Other Anatomical Conduits	199718473	Foreign	2-Aug-98	Issued 723785
TRNSV-015AU	Catheters and Related Devices for Forming Passageways Between Blood Vessels or Other Anatomical Structures	73581/98	Foreign	10-Apr-98	Issued 749373